

The RTR tetramer and both monomeric peptides (RTR and RTRGG) also inhibited polymorphonuclear leukocytes activated by the ultrafiltered tripeptide chemoattractants; albeit at much higher concentrations (TABLE 2). None of the peptides were antagonistic to LTB<sub>4</sub> activation of polymorphonuclear leukocytes (TABLE 3). None of the complementary peptides stimulated resting polymorphonuclear leukocytes (TABLE 4).

**TABLE 2**

Complementary Peptide Inhibition of PMN Polarization Activated by  
Alkali-Degraded Rabbit Corneal Ultrafiltrate

5

Complementary Peptides	Antagonist Activity (ID50)	p-value
RTR tetramer	$30 \mu\text{M} \pm 7 \mu\text{M}$	<0.001
RTR	$7.4 \text{ mM} \pm 1.6 \text{ mM}$	<0.001
RTRGG	$9.0 \text{ mM} \pm 2.5 \text{ mM}$	<0.001

\* Untreated polymorphonuclear leukocytes (negative control)

produced a polarization response of  $6.6\% \pm 1.4\%$  ( $n = 10$ ). PMNs

activated with the ultrafiltered tripeptide chemoattractants (25.0 mg

original corneal dry weight degraded per ml of alkali) produced a

10 positive control polarization response of  $57.6\% \pm 4.4\%$  ( $n = 10$ ). This

chemoattractant concentration was selected from the linear portion

of the dose response curve, yielding approximately 50% polarization

after subtraction of the negative control values. Antagonistic activity

(ID50, mean  $\pm$  standard deviation) was interpolated from five dose

15 response curves for each complementary peptide.

TABLE 3

Complementary Peptide Inhibition of LTB<sub>4</sub> Activated PMN

5   Polarization

Complementary Peptides	Antagonist Activity
RTR tetramer	None, $\leq$ 20 mM
RTR	None, $\leq$ 10 mM
RTRGG	None, $\leq$ 10 mM

\* Untreated polymorphonuclear leukocytes (negative control)

produced a polarization response of  $5.3\% \pm 2.1\%$  ( $n = 6$ ). PMNs

activated with  $2 \times 10^{-9}$  M LTB<sub>4</sub> (positive control) produced a

10 polarization response of  $53.4\% \pm 11.3\%$  ( $n = 6$ ). This chemoattractant

concentration was selected from the linear portion of the dose

response curve, yielding approximately 50% polarization after

subtraction of the negative control values. Antagonistic activity

(ID<sub>50</sub>, mean  $\pm$  standard deviation) was determined from five dose

15 response curves for each complementary peptide.